

# Interior Department Innovations in Conservation Delivery

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# A few modest challenges

- ❖ Climate change
- ❖ Land use and habitat change
- ❖ Invasive species
- ❖ Wildfire
- ❖ Species conservation
- ❖ Energy development (renewable and conventional)
- ❖ Multiple competing demands (including that of “change”)



# Lessons .... and Goals

- ❖ Operate at landscape scale (put local into context)
- ❖ Operate across jurisdictions
- ❖ Integrate multiple uses / demands
- ❖ Ensure tight linkages between science and management
- ❖ Facilitate adaptive management
- ❖ Get ahead of the curve
- ❖ Partners are key



- ❖ NPS / FWS Inventory and Monitoring Program
- ❖ Rapid Ecological Assessments – Bureau of Land Management + **partners**
- ❖ Landscape Conservation Cooperatives – All DOI bureaus + **partners**
- ❖ Climate Science Centers – ALL DOI bureaus (USGS lead) + **partners**





# BLM Rapid Ecoregional Assessments

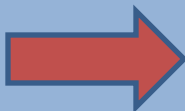
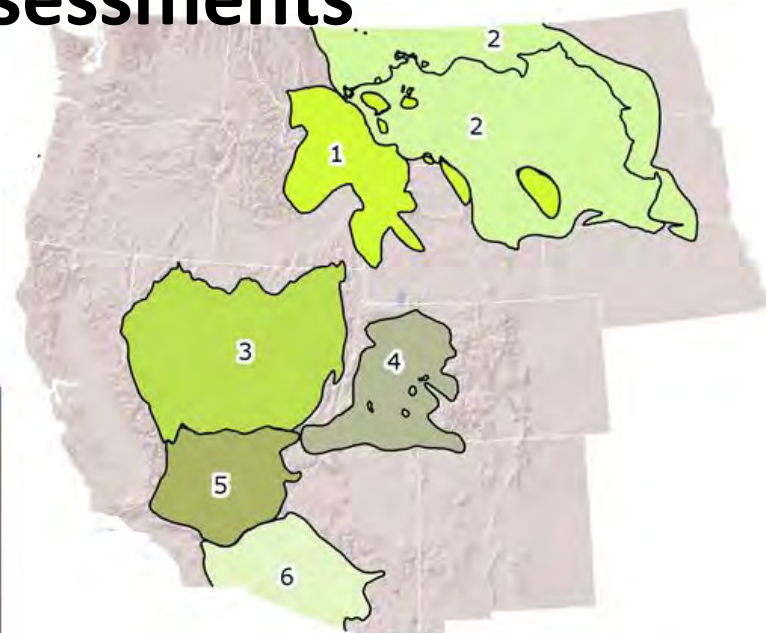
**Key purposes:**

**Synthesize existing  
information**

**Identify potential areas for  
conservation and  
development**

**Project future trends from  
climate change, fire,  
invasive species,  
development**

**Establish baseline ecological  
data to gauge change,  
management  
effectiveness**



**Create direct links to  
management and decision  
making**





# Fundamentals

- Consistent approach
- Rapid: approximately 18 months
- Use only **AVAILABLE** information
- Seek interagency participation
- First REAs completed in 2012
- Common management questions, change agents, conceptual models
- Appropriate peer review
- Opportunity for public involvement





# Field Implementation

## Making it real through:

- ❖ Land Use Planning
- ❖ Use authorization/BMPs
- ❖ Land tenure adjustments
- ❖ On-the-ground projects
- ❖ Sub-assessments and monitoring
- ❖ Budget Process
  - How to focus and share resources






# Key REA Partnering Opportunities

Initiation	Phase I	Phase II
<ul style="list-style-type: none"> <li>• Participate on assessment management or technical team</li> <li>• Define preliminary management questions</li> <li>• Identify common landscape issues</li> <li>• Prepare assessment work plan</li> </ul>	<ul style="list-style-type: none"> <li>• Refine management questions</li> <li>• Suggest conservation elements</li> <li>• Suggest change agents</li> <li>• Recommend potential data sets</li> <li>• Recommend methods and models</li> </ul>	<ul style="list-style-type: none"> <li>• Provide available data</li> </ul>
	<ul style="list-style-type: none"> <li>• Provide technical review</li> <li>• Participate in peer review</li> </ul>	

# Rapid Ecoregional Assessments

-  LCC Boundaries
-  BLM Lands
-  2010 - Initiated
-  2011 - Proposed

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# Landscape Conservation Cooperatives: Geographic Areas



## Landscape Conservation Cooperatives

- |   |                                   |                                     |                                  |
|---|-----------------------------------|-------------------------------------|----------------------------------|
| 1. Appalachian                              | 6. Great Northern                 | 12. Peninsular Florida              | 18. Arctic                       |
| 2. California                               | 7. Great Plains                   | 13. Plains and Prairie Potholes     | 19. Northwestern Interior Forest |
| 3. Desert                                   | 8. Gulf Coast Prairie             | 14. South Atlantic                  | 20. Western Alaska               |
| 4. Eastern Tallgrass Prairie and Big Rivers | 9. Gulf Coastal Plains and Ozarks | 15. Southern Rockies                | 21. Pacific Islands              |
| 5. Great Basin                              | 10. North Atlantic                | 16. Upper Midwest and Great Lakes   | Unclassified                     |
|   | 11. North Pacific                 | 17. Aleutian and Bering Sea Islands |                                  |

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Map Date: 03192010



# Landscape Conservation Cooperatives

## What are they?

Applied conservation science partnerships. Partners include federal and state agencies, Tribes, conservation organizations, and universities within a geographically defined area

Fundamental units of planning and adaptive science that inform conservation actions on the ground

A national and international network of land, water, wildlife and cultural resource managers and interested public and private organizations







# Landscape Conservation Cooperatives

## What do they do?

- Identify common goals and priorities
- Link science and conservation delivery
- Support biological planning, conservation design and adaptive management
- Evaluate the effectiveness of scientific information and conservation actions





# Landscape Conservation Cooperatives

## Key Components

- A steering committee of partners
- LCC coordinator
- Planning and technical staff
- GIS capability and other scientific expertise
- Communications



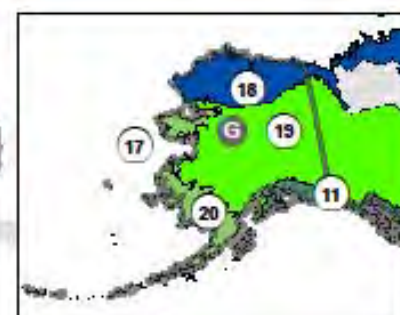
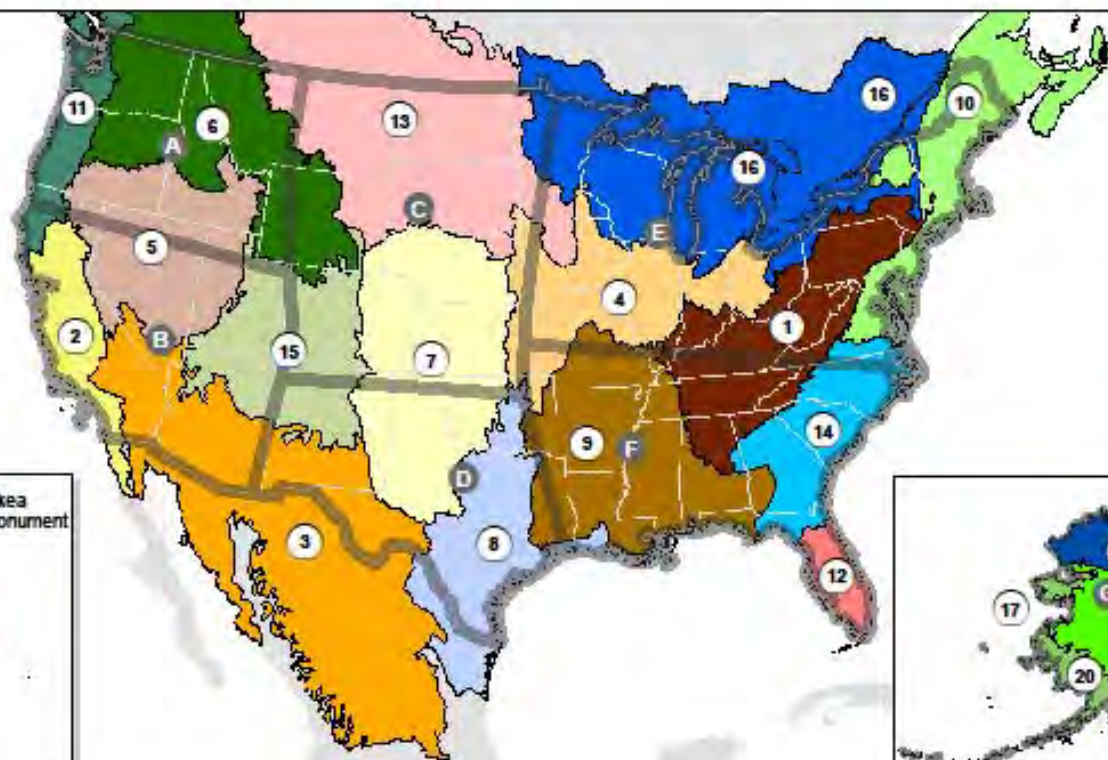
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# U.S. Department of the Interior

## Landscape Conservation Cooperatives - Climate Science Centers



### Climate Science Centers

- A Northwest
- B Southwest
- C Northcentral
- D Southcentral
- E Northeast
- F Southeast
- G Alaska
- H Pacific Islands

### Landscape Conservation Cooperatives

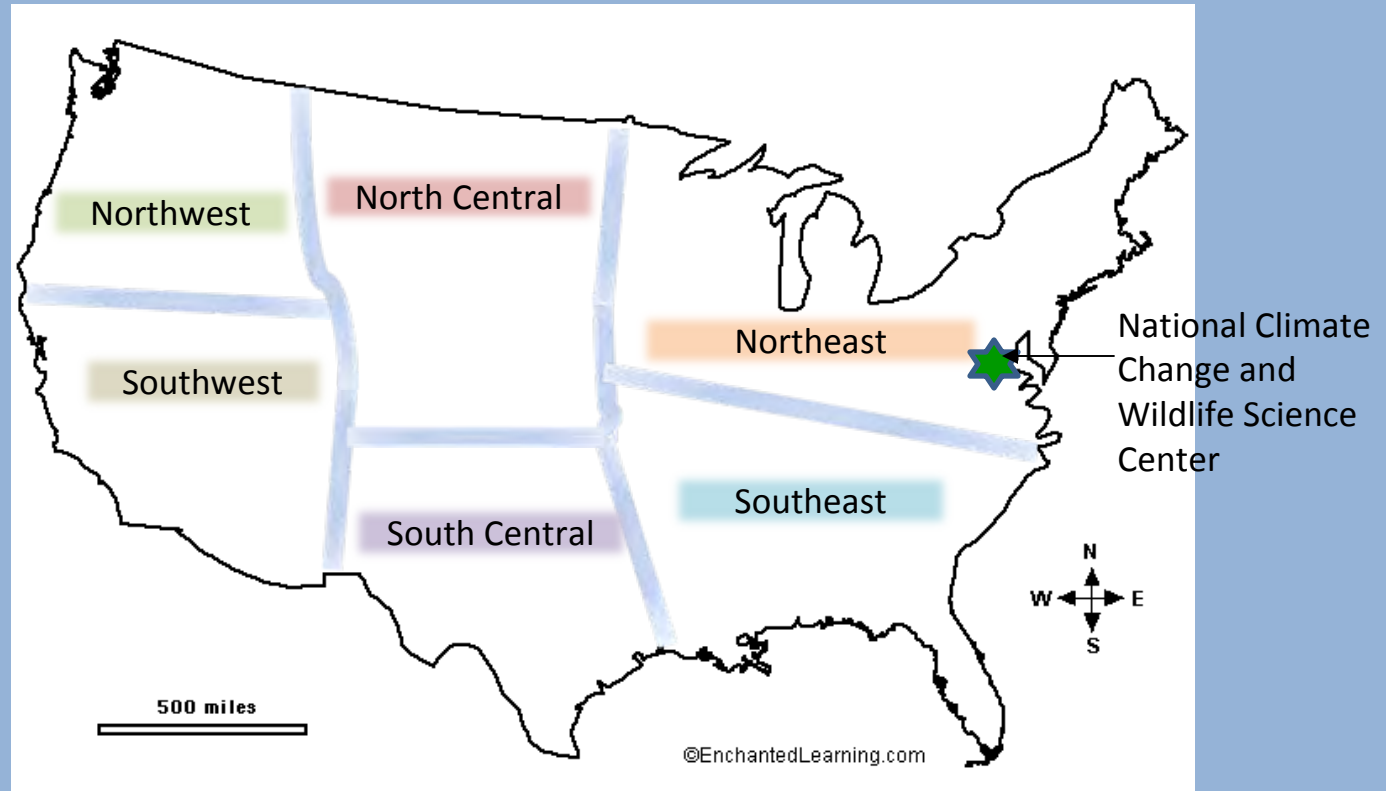
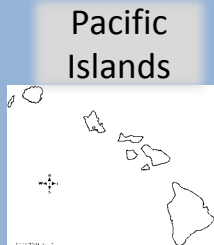
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# Climate Science Centers--Regions



“Fuzzy Boundaries”



# DOI Climate Science Centers

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## Priority Science Activities:

- Integrate physical climate models with ecological, habitat, and population response models
- Develop models and forecast fish and wildlife population and habitat changes
- Develop methods and assess vulnerability of species and habitats
- Develop standardized approaches to modeling and monitoring



# DOI Climate Science Centers

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- Government – university partnership
- Driven by science needs identified by LCCs and other managers
- “Co-development” of science
- Three funded and being implemented (NW, SE, AK)
- Two identified by awaiting FY 11 budget (SW, North Central)
- Three to be established in FY 12 (NE, South Central, Pacific Islands)
- \$3-4 million per center per year  
(at full operational scale)



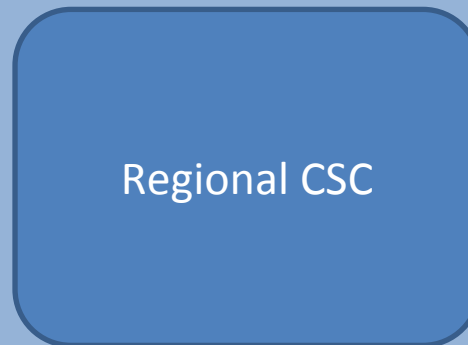
# Climate Science Centers

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Potentially most valuable role?

*Convener of the parties*

USERS with NEEDS  
(management  
community  
convened  
by LCCs)



SCIENTISTS with  
CAPABILITIES  
(USGS, host university,  
other feds, etc.)

Regional Science Agenda

# A new model

- ❖ Landscape scale – by design
- ❖ Collaborative priority setting
- ❖ Strong management linkages
- ❖ Translational science
- ❖ Collaborative science planning
- ❖ Nimble design, flexible resources
- ❖ Collaboration is an assigned task



Thank you

